

Sleep Studies: In the Sleep Laboratory and in the Home

It can be normal to have trouble sleeping from time to time, but if you are having trouble sleeping most nights, you may have a sleep problem. Sleep problems can affect your quality of life, and some can pose a serious threat to your health if left untreated. If you think you might have a sleep problem, discuss your symptoms with your healthcare provider.



After reviewing your sleep history, your healthcare provider may refer you to a specialized sleep center/lab, where trained technicians will perform a sleep study. Sleep studies are tests that monitor your sleep, either overnight or during a series of naps during the day. These tests are painless and used to diagnose sleep problems such as insomnia, sleep apnea, or narcolepsy.

Why do I need a sleep study?

Your healthcare provider has determined that you are having health problems possibly related to poor sleep. Sleep studies will help your healthcare provider determine whether you have a sleep problem and, if so, what the best treatment options are for you.

What are some of the most common signs of sleep problems?

- Snoring loudly during sleep
- Stopping breathing during sleep
- Sleeping in a fitful or restless manner
- Feeling very sleepy during the day

If you have one or more of these signs, you may have a sleep problem. Examples of two common sleep problems are: obstructive sleep apnea, a condition in which you stop breathing during sleep due to a narrowed or closed airway, and narcolepsy, a condition in which you experience daytime sleepiness and may fall asleep at unexpected times, such as during work, school, or driving. These and other sleep conditions can cause serious health problems and poor quality of life and need to be properly diagnosed and treated.

What are the different types of sleep studies?

The evaluation of sleep problems can be done at home or in a specialized sleep center that can study your sleep during the day or at night. The sleep specialist will decide which type of study is best to evaluate your sleep problem.

There are different types of studies conducted at night, called "overnight studies," and they can be performed at home or in a sleep lab:

- Home sleep testing: This study records breathing rate and airflow, heart rate and oxygen levels and is performed in the home. A technician will train you in using the equipment and will not be present overnight during the study.
- Full Polysomnography (pa-lee-SOM-no-gram): This study is generally performed in a sleep laboratory (lab). Several body functions are measured during sleep including; breathing, heart rate, body movements, brain activity, and eye movements. A technician is available and observing during the study.
- Continuous Positive Airway Pressure Trial: This test is done to see how well you sleep while using nasal continuous positive airway pressure therapy (CPAP), a treatment for obstructive sleep apnea. As you sleep, CPAP delivers air to you through a mask placed over your mouth and nose or only over your nose. The air that flows into your lungs under slight pressure prevents the airways from narrowing or closing, allowing you to breathe normally and sleep well. A CPAP trial is generally performed in a sleep lab as it requires trained staff to make adjustments in the settings based on how the person is doing.

